CITY OF CARLSBAD PUBLIC WORKS DEPARTMENT

STORM WATER STANDARDS

FOR

CONSTRUCTION SITES

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DRAFT

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INTRODUCTION

This manual is intended to provide information on storm water pollution prevention measures or best management practices (BMPs) for construction sites that are not required to prepare a Storm Water Pollution Prevention Plan (SWPPP). The City of Carlsbad has selected and included BMPs in this manual to be used for ministerial permits. Ministerial permits are construction permits that do not require discretionary review, such as building permits, right-of-way permits, and sign permits.

BMPs are required for all construction permits to the maximum extent practical (MEP) in the City of Carlsbad. This requirement is based on the Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit) issued on February 21, 2001.

The BMPs contained in this manual are the minimal BMPs that would be found on all construction sites. Additional BMPs may be required on a construction site and it is not intended that this manual imply any limitations. It is expected that BMPs will be implemented to the maximum extent practicable.

Reference to Resident Engineer in the Caltrans manual shall mean the responsible party, owner, builder, and contractor, not a representative from the City of Carlsbad.

The detail numbers, and sections referenced in this document have been obtained directly from Caltrans website www.dot.ca.gov/manuals and from California Stormwater Quality Association website www.cabmphandbooks.com. Please refer to this documents for additional BMPs and details.

Carlsbad Modifications to Construction Site BMPs

TC-1 Shall be modified to provide 2" to 3" minus rock and a fence, barrier, or other approved device shall be installed to restrict access to only the construction entrance.

Construction Site BMP Cross-Reference Table

It should be noted that this table is for reference, additional BMPs may be required that are not checked. Please evaluate project site conditions and scope of work for applicability of BMPs.

Consult with City staff or the project consultants for assistance if necessary.

City of Carlsbad Construction Site BMPs Cross-Reference Table

				CICIICC											
Q CX O	(A) (A)	Smonono	400 ROLL	Appropriet SE ON A	GENERAL SOR USE	GENERAL ON ASS.	RETAIN MASON (VI)	SICO MALLO	SWO WW SWST	PATICAPIN	00/04/00/	PON 504	RE.R. DOUTE	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
TEMPO	RARY S	OIL STABILIZATION													
EC-1	SS-1	Scheduling	Х		√		$\sqrt{}$	$\Box $	√		√				
EC-2		Preservation of Existing Vegatation	Х		V										
EC-3	SS-3	Hydraulic Mulch	Х		√(2)										
EC-4	SS-4	Hydroseeding	Х		√(2)										
EC-5	SS-5	Soil Binders	Х		√(2)										
EC-6	SS-6	Straw Mulch	X		√(2)										
EC-7	SS-7	Geotextiles, Plastic Covers & Erosion Control Blankets/Mats	X		√(2)				√						
EC-8	SS-8	Wood Mulch	Х						√						
EC-9	SS-9	Earth Dikes/Drainage Swales & Lined Ditches		Х											
EC-10	SS-10	Outlet Protection/Velocity Dissipation Devices		Х					√						
EC-11	SS-11	Slope Drains		Х											
EC-12	SS-12	Streambank Stabilization	Х												
TEMPOI	RARY S	EDIMENT CONTROL													
SE-1	SC-1	Silt Fence	Х		√(3)										
SE-2	SC-2	Sediment/Desilting Basin		Χ											
SE-3	SC-3	Sediment Trap		Χ											
SE-4	SC-4	Check Dam		Χ											
SE-5		Fiber Rolls		X	√(3)										
SE-6	SC-6	Gravel Bag Berm		X											
SE-7	SC-7	Street Sweeping and Vacuuming	Х								$\sqrt{}$	√	√		
SE-8		Sandbag Barrier		Х											
SE-9	SC-9	Straw Bale Barrier		X											

City of Carlsbad Construction Site BMPs Cross-Reference Table

	(A) (CA,	Smon Names	4004O4	X APPROPUSE ON AL	GENERAL SPORUSE	GE REULING BY	RET COUNTING MINIS	STUCING WOOD WAY	05/05/05/05/05/05/05/05/05/05/05/05/05/0	OMO OMO SANTA	S S S S S S S S S S S S S S S S S S S	0/0/0/0/0/	8/8/5/04 8/8/6/04	PE NOON THE	Show som	
SE-10	SC-10	Storm Drain Inlet Protection		Х	\checkmark	L√	L√ L	√	✓	√	✓	√	✓	✓		_
		CONTROL	1	1		1		T		ı	ı	T	ı	, I	1	
WE-1		Wind Erosion Control	X				Ш							Ш		
	ING CON		T	1 1		ı									Т	
		Stabilized Construction Entrance/Exit		X												
TC-2	TC-2	Stabilized Construction Roadway		Х												
TC-3	TC-3	Entrance/Outlet Tire Wash		Х			Ш							Ш		
		ATER MANAGEMENT		1					. 1						-	
NS-1	NS-1	Water Conservation Practices	Х			√	√	-√	√	√	√	√	√.	√		
NS-2		Dewatering Operations	Х										✓			
NS-3		Paving and Grinding Operations	X													
NS-4	NS-4	Dewatering Operations	Х													
NS-5	NS-5	Clear Water Diversion	Х			_					_					
NS-6	NS-6	Illicit connection/Illegal Discharge Detection/Reporting	Х		-√	√	√	√	√	√.	√	√	✓	√		
NS-7	NS-7	Potable Water/Irrigation	X			<u> </u>				-√						
NS-8	NS-8	Vehicle and Equipment Cleaning	X		-√	✓	✓	√		-√	√	√	✓	√		
NS-9	NS-9	Vehicle and Equipment Fueling	X		-√		\sqcup									
	NS-10	Vehicle and Equipment Maintenance	X		-√											
		Pile Driving Operations	X													
		Concrete Curing	X			√	√	√	\checkmark	√	√	✓	✓	√		
		Concrete Finishing	X													
NS-14	NS-14	Material and Equipment Use Over Water	X			<u> √</u>	<u> </u>	<u>√</u>		✓	√	√	_√	L√		

City of Carlsbad Construction Site BMPs Cross-Reference Table

		SWEAT SWIE OMIS	400 KOLL	APPONISE ON AL	GENERAL PROPUSE	GEA PECULO, SECTION	RET CHINGING MINIS	STILLING SONRY IMUM	S/N/M/S/S/S/S/S/S/S/S/S/S/S/S/S/S/S/S/S/	TAN TIMOOMS	DAY ON	0/10/0/ NG	20,5% (Sp. / Sp. /	REGIONAL	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
NS-15	NS-15	Structure Demolition/Removal Over or Adjacent to Water	Х													
WASTE	MANAC	EMENT AND MATERIALS POLLUTION CONTROL														
		Material Delivery and Storage	X		√	√	√	√	√	√	√	√	√	√		
WM-2	WM-2	Material Use	X		√	√	√	√	√	√	√	√	√	√		
WM-3	WM-3	Stockpile Management	X		√	√	√	√		√	√	√	√	√		
		Spill Prevention and Control	X		√	√	√	√		√	√	√	√	√		
	WM-5	Solid Waste Management	Х		√	$\sqrt{}$	$\sqrt{}$	√	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
WM-6	WM-6	Hazardous Waste Management	Х													
		Contaminated Soil Management	Х													
WM-8	WM-8	Concrete Waste Management	Х		√	√	√	√	\checkmark	√	\checkmark	√	√			
	WM-9	Sanitary/Septic Waste Management	Х		√											
WM-10	WM-10	Liquid Waste Management	Х													1

- (1) Implementation depends on applicability to a project.
- (2) The Contractor shall select one of the five measures listed or a combination thereof to achieve and maintain the contract's rainy season disturbed soil area (DSA) requirements.
- (3) The Contractor shall select one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy season disturbed soil area (DSA) requirements.

Checklists



City of Carlsbad Construction Site NPDES Compliance Inspection Checklist BUILDING DEPARTMENT

OF C	ARLOG
0	8
CALIFO	RNIA

Inspection Type:			□ Founda	tion	□ Elect/Plumb	□ Other	
Inspected B	By:				Weather:_		
Project Nar	ne/#:				D	ate:	
Ma	rk (√)	box "	Yes", "No	', or "N/A'	; if there are commen	ts, mark ($\sqrt{\ }$) box "Comm	ent".
Yes	No	N/A	Commen	t	In	spection Description	
				1. Are slo	opes steeper than 3:1 prop	perly covered?	
						les, silt fences, and other lind are they functioning prop	near sediment barriers in place in perly?
					gravel bags, straw wadd e they functioning proper		near sediment barriers in place
				4. Is the s	stabilized construction en	trance preventing tracking ((i.e. working properly)?
					downstream storm drain properly maintained?	inlets protected with device	es that are in working order and
				6. Are no	n-storm-water BMPs bei	ng used? (e.g. concrete was	houts)
					material and equipment l leaks, or other deleteriou		tenance areas clean, and free of
				8. Is the si	ite free from litter and the	e litter collected and placed	in covered containers?
					nporary stockpiles and/or ted/covered?	construction materials in a	pproved areas and
				10. Are all	l seeded or landscaped an	nd irrigation areas properly	maintained?
				11. Are al	l natural drainage course	s and open spaces in proxin	nity to this project protected?
					l BMPs maintained in fur repairs made, etc.)	nctional order? (e.g. sedime	ent removed, basins pumped
Comments:							
Signature:						Date:	



City of Carlsbad

Construction Site NPDES Compliance Inspection Checklist Construction Management & Inspection Division

CALIFORNIA
VF UT

Inspection Type:			□ Weekly	☐ Monthly	□ Pre-storm	☐ Post-event
Inspected B	y:				Weather:	
Mai	k (√)	box "	Yes", "No"	, or "N/A"; if there are comr	ments, mark ($\sqrt{\ }$) box "Comm	nent".
Yes	No	N/A	Comment	t .	Inspection Description	
				1. Are slopes steeper than 3:1	properly covered?	
				2. Are areas flatter than 3:1 co	overed or protected by desilting	s basins?
				3. Is the SWPPP wall map up	to date and accurate?	
					vaddles, silt fences, and other li P, and are they functioning pro	inear sediment barriers in place in perly?
				6. Are basins designed and ma	aintained to provide the require	ed retention/detention?
				7. Is the stabilized construction	n entrance preventing tracking	(i.e. working properly)?
				8. Are all downstream storm d being properly maintained?		es that are in working order and
				9. Are non-storm-water BMP	's being used? (e.g. concrete w	ashouts)
				10. Are all material and equipment spills, leaks, or other delete		intenance areas clean, and free of
				11. Is the site free from litter a	nd the litter collected and place	ed in covered containers?
				12. Are temporary stockpiles a protected/covered?	nd/or construction materials in	approved areas and
				13. Are all seeded or landscape	ed and irrigation areas properly	maintained?
				14. Are all natural drainage co	urses and open spaces in proxi	mity to this project protected?
				15. Are all BMP's maintained down, repairs made, etc.)	in functional order? (e.g. sedin	nent removed, basins pumped
Comments:						
Signature:					Date:	

City of Carlsbad

Storm Water Fact Sheet

Checklist for Building/Grading Permits

Project Name:	Location:
Contractor:	
Project Class: (please check appropriate box)	
Exempt (no outside work) Stop here!	
☐ Building Permit	
Grading/Building Permit	
Activities: (please check all that apply) □ Demolition (outside)	□ Excavation
☐ Grading	☐ Construction/Repair
Disturbed Area: (please check appropriate box)	- Constitution repair
\Box < 5,000 sq/ft	□ > 1 acres (requires CA General Construction Permit)
\Box < 20,000 sq/ft	□ > 1 acres and discharges to tributary of CWA
□ < 1 acre	section 303(d) water body or 200 feet (ESA)
	□ > 50 acres
Grading/Construction: (please check appropriate bo	x)
When will Grading/Construction Activities Occur? ☐ Wet Season (October 1 - April 30)	
☐ Dry Season (May 1 - September 30)	
☐ Both	
Proximity to Water Bodies: (please check appropriate	te box)
Carlsbad Watershed	,
☐ Hydrologic Unit A	☐ Hydrologic Unit C
Hydrologic Unit B	☐ Hydrologic Unit D
Receiving Water Body	
☐ Buena Vista Lagoon	☐ Batiquitos Lagoon
☐ Agua Hedionda Lagoon☐ Encinas Creek	☐ Pacific Ocean
Distance from receiving water bodyfeet	
Projects requiring Building Permit must include follo	
☐ Certificate of intent to comply ☐ Charliet of selected PMPs applicable	☐ Storm Water Pollution Prevention Plan (SWPPP) [or a Caltrans Water Pollution Control Plan (WPCP)
☐ Checklist of selected BMPs applicable	(optional)]
Projects Not subject to CA General Construction Perinclude following items:	mit (require grading permit and > 1 acres) must
☐ Certificate of intent to comply	☐ SWPPP (optional)
☐ Checklist of selected BMPs and location	□ WPCP (optional)
on project plans	☐ Certificate of intent to maintain selected BMPs
Projects subject to CA General Construction Permit	
□ Notice of Intent (NOI) and SWRCB letter	□ SWPPP or WPCP
issuing WDID number ☐ Checklist of selected BMPs and location	Certificate of intent to maintain selected BMPs
on project plans	☐ Substitution of SWPPP for BMP checklist and project plans

City of Carlsbad Storm Water Fact Sheet Checklist for Building/Grading Permits

<u>N/.</u>	<u>A</u>	Yes	No	
1.	Plan to manage storm water and non-storm water discharges during construction activities at all times?			
	If no, provide Storm Water Management Application Form.			
2.	Does grading occur during the wet season (October 1 - April 30)?			
	If yes, can grading be rescheduled?			
	What additional BMPs (e.g., Phasing, Minimize Disturbed Soil Area) will be required?			
3.	Are adequate erosion prevention BMPs included?			_
	If no, additional BMPs required?	Ш	Ш	
4.	Are adequate sediment control BMPs included?	_	_	
	If no, additional BMPs required?	Ц		
5	Is alsoning and grading minimized to only the neution			
5.	Is cleaning and grading minimized to only the portion of the site necessary for construction?			
	If no, any additional requirements?			

City of Carlsbad Strom Water Fact Sheet Checklist for Building/Grading Permits

<u>A</u>	Yes	<u>No</u>	
Is the exposure time of disturbed soil areas minimized? If no, any additional requirements?			
Will the disturbed area be temporarily stabilized and reseeded as rapidly as possible? If no, any additional requirements?			
Will the disturbed area be permanently revegetated or landscaped as early as feasible? If no, any additional requirements?			
If slopes are disturbed, will the slopes be stabilized? If no, any additional requirements?			
	Will the disturbed area be temporarily stabilized and reseeded as rapidly as possible? If no, any additional requirements? Will the disturbed area be permanently revegetated or landscaped as early as feasible? If no, any additional requirements? If slopes are disturbed, will the slopes be stabilized?	Is the exposure time of disturbed soil areas minimized? If no, any additional requirements? Will the disturbed area be temporarily stabilized and reseeded as rapidly as possible? If no, any additional requirements? Will the disturbed area be permanently revegetated or landscaped as early as feasible? If no, any additional requirements?	Is the exposure time of disturbed soil areas minimized? If no, any additional requirements? Will the disturbed area be temporarily stabilized and reseeded as rapidly as possible? If no, any additional requirements? Will the disturbed area be permanently revegetated or landscaped as early as feasible? If no, any additional requirements? If slopes are disturbed, will the slopes be stabilized?

CITY OF CARLSBAD STORM WATER QUALITY PROJECT PRIORITY DETERMINATION CHECKLIST

State law holds the City responsible for any type of water pollution caused within City limits. In order to help us keep pollution out of our waterways, we need your help. Please check the appropriate YES/NO box as it relates to the project you are submitting for a building permit.

This form must be completed and submitted with your permit application.

PA	RT A – DOES YOUR PROJECT INCLUDE A:	YES	NO
1.	Detached residential development of 10 or more units?		
2.	Attached residential development of 10 or more units?		
3.	Commercial development greater than 100,000 square feet?		
4.	Automotive repair shop?		
5.	Restaurant?		
6.	Hillside development with a slope greater than 15% that disturbs more than		
	5,000 square feet of ground?		
7.	Possible drainage of rainwater toward a waterway with natural vegetation		
	such as: a creek, stream or wetland area with natural occurring plants?		
8.	Parking lot greater than or equal to 5,000 square feet or with at least 15		
	uncovered parking spaces?		
9.	Street or road which would create a new paved surface that is 5,000 square		
	feet or greater?		
Lim	ited Exclusion: Trenching and resurfacing work associated with utility projects.		

If any answer in Part A is "YES", your project is subject to the "Priority Project Permanent Storm Water Best Management Practices (BMP) Requirements," <u>and</u> "Standard Permanent Storm Water BMP Requirements".

To find out what these requirements are, you can visit the City of Carlsbad website at: www.ci.carlsbad.ca.us/cserv/susmppdf/susmp.pdf or ask at the City's Engineering Counter to review or purchase a copy. These BMPs must be included in the design of your site.

PART B – DOES YOUR PROJECT PROPOSE:			NO
1.	New impervious areas, such as: rooftops, roads, parking lots, driveways, or sidewalks?		
2.	New landscape areas with irrigation systems?		
3.	Permanent structures within 100 feet of any natural water body?		
4.	Outdoor trash enclosures?		
5.	Permanent liquid or solid material loading and unloading areas?		
6.	Vehicle or equipment fueling, washing, or maintenance areas?		
7.	A use that will require a permit for storm water discharge associated with		
	industrial activities (except construction)?*		

8.	Commercial or industrial waste handling or storage, excluding typical office				
	or household waste?				
9.	9. More than 100 cubic yards of grading or more than 5,000 square feet of				
	ground disturbance during construction?				
10.	10. Any new storm drains, or alteration to existing storm drains?				
*To find out if your project is required to obtain a permit for storm water discharges associated					
with	n industrial activities, visit the State Water Resources Control Board	web s	ite at:		
www.swrcb.ca.gov/stormwtr/industrial.html					

If all answers to Part A are "NO", and <u>any</u> answers to Part B are "YES", your project is only subject to the "Standard Permanent Storm Water BMP Requirements". and you <u>must</u> fill out Part C below. **If every question in Part A and B is answered "NO", DO NOT ANSWER PARTS C OR D**, your project is exempt from permanent pollution control requirements and no further action regarding this is needed. Thank you.

PART C – WOULD YOUR PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?			NO
1.	Is the project subject to California's statewide General NPDES Permit for storm water discharges associated with construction activities?**		
	Does the project propose grading or soil disturbance?		
3.	Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?		
	Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete, and stucco)?		
**To find out if your project is required to obtain a permit for storm water discharges associated with construction activities, visit the State Water Resources Control Board web site at: www.swrcb.ca.gov/stormwtr/construction.html			

- If every question in Part C is answered "NO", your project is exempt from any additional requirements.
- If the answer to question 1 of Part C is "Yes", your project is subject to "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP)
- If the answer to question 1 is "No" but any other question in Part C was "Yes", your project is subject to "Construction Storm Water BMP Performance Standards," and must prepare a Water Pollution Control Plan (WPCP).
- If <u>any</u> of the answers to the questions in Part C are "YES", complete Part D, below.

PART D

Please check the box next to the	"priority"	that best describes your project.
☐ Hiah Prioritv		

- Projects 1 acre or more
- Projects requiring grading permit

	Medium	Priority
--	--------	----------

- Projects in the public right-of-way where grading occurs, such as installation of sidewalk, substantial retaining walls, or curb and gutter for a majority of street frontage.
- Projects on private property where grading permits are required.

Low Priority

- Projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
- Projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

Certifications

STORM WATER MANAGEMENT PLAN

APPLICANT'S CERTIFICATION OF SWMP

I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Date	
Name and Title	Telephone Number	